



Teacher Shortage Report for Missouri

December 2021

METHOD

The Missouri Department of Elementary and Secondary Education uses teacher qualification to identify the designated areas of critical shortage.

- Shortage areas were defined as those content areas within the state for which positions were filled with unqualified teacher(s) or left vacant due to the absence of qualified candidates.
- Unqualified teachers and total FTE count for each content area were compiled.
- Unqualified teachers by content area were determined by comparing the number of unqualified FTE to the total FTE count for each content area.
- The percentage FTE shortage by content area was determined by calculating the percentage of unqualified teachers per content area as compared to the total number of teachers in the state.
- A weighted value to represent the relative prominence of each content area was calculated as a percentage of the total FTE by content area as compared to the total number of teachers in the state.
- A weighted percentage of FTE shortage by content area was determined by multiplying the raw percentage FTE shortage by the weight of each content area.
- Consistent with the U.S. Department of Education Teacher Shortage Areas External User Guide, the sum of shortage areas was determined not to exceed 5% of the total number of FTE teaching positions within the state.

DATA SOURCES

- School districts in Missouri through the Missouri Student Information System (MOSIS), including educator core data, educator school, educator vacancy, and course assignment collections.
- Department of Elementary and Secondary Education's Educator Certification System.

DATA

- Unqualified teacher FTE by content area (statewide) defined as less-than-fully qualified personnel or left vacant.

ASSURANCES

- Written objective standards were used in determining the proposed teacher shortage areas.
- Chief State School Officer's staff consulted with private non-profit school officers within the state.
- 2020-2021 data was used to determine the proposed teacher shortage areas.
- Chief State School Officer will provide an annual list of designated teacher shortage areas to all Chief Administrative Officers of the affected schools in Missouri.

CONTACT PERSON

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CHIEF STATE SCHOOL OFFICER

Dr. Margie Vandeven
Commissioner of Education
Missouri Department of Elementary and Secondary Education



Signature

12-8-21

Date

- I. Name of State:**
 - a. Missouri
- II. Applicable School Year:**
 - a. Designations are for 2022-2023; data used were from the 2020-2021 academic year.
- III. Date Prepared:**
 - a. November 30, 2021
- IV. Total of all the FTE teaching positions within the state from 2020-2021 academic year: 71,705**
 - a. The number of unqualified or vacant FTE by content area throughout the state that represents 5.00% of the total FTE is 3,585.
- V. Shortage areas are listed by content area in order from most severe to least, as determined by MOSIS data:**

Five percent of total FTE

- | | |
|--|-------------------------------------|
| 1. Mild/Moderate Cross Categorical K-12 | 19. Social Science 9-12 |
| 2. Elementary Education 1-6 | 20. Instrumental Music K-12 |
| 3. Early Childhood Special Education B-3 | 21. Vocal Music K-12 |
| 4. Severe Development Disabled B-12 | 22. Chemistry 9-12 |
| 5. Early Childhood Education B-3 | 23. English Language Learners K-12 |
| 6. Physics 9-12 | 24. Special Reading K-12 |
| 7. Mathematics 5-9 | 25. Spanish K-12 |
| 8. Biology 9-12 | 26. Health K-12 |
| 9. General Science 5-9 | 27. Technology and Engineering 5-9 |
| 10. Art K-12 | 28. Technology and Engineering 9-12 |
| 11. Language Arts 5-9 | 29. Gifted Education K-12 |
| 12. English 9-12 | 30. Speech and Theatre 9-12 |
| 13. Mathematics 9-12 | 31. Business Education 5-9 |
| 14. Physical Education K-12 | 32. Agricultural Education 9-12 |
| 15. Business Education 9-12 | 33. Marketing 9-12 |
| 16. Family and Consumer Sciences B-12 | 34. Speech and Theatre 5-9 |
| 17. Earth Science 9-12 | 35. Agricultural Education 5-9 |
| 18. Social Science 5-9 | 36. Journalism 9-12 |

VI. Shortage areas are listed by content for the state in order from most severe to least, as determined by MOSIS data and represents 5.00% of the total FTE in the state:

Subject Area	FTE Unqualified	Shortage Indicator by Total FTE
MILD/MODERATE CROSS CATEGORICAL K-12	462.95	0.65%
ELEMENTARY EDUCATION 1-6	314.13	0.44%
EARLY CHILDHOOD SPECIAL EDUCATION B-3	263.24	0.37%
SEVERE DEVELOPMENT DISABLED B-12	233.02	0.32%
EARLY CHILDHOOD EDUCATION B-3	220.00	0.31%
PHYSICS 9-12	155.32	0.22%
MATHEMATICS 5-9	141.60	0.20%
BIOLOGY 9-12	114.00	0.16%
GENERAL SCIENCE 5-9	107.81	0.15%
LANGUAGE ARTS 5-9	103.62	0.14%
ENGLISH 9-12	99.63	0.14%
MATHEMATICS 9-12	99.12	0.14%
ART K-12	97.63	0.14%
PHYSICAL EDUCATION K-12	95.59	0.13%
BUSINESS EDUCATION 9-12	94.49	0.13%
FAMILY AND CONSUMER SCIENCES B-12	90.67	0.13%
INSTRUMENTAL MUSIC K-12	82.17	0.11%
EARTH SCIENCE 9-12	81.64	0.11%
SOCIAL SCIENCE 5-9	80.36	0.11%
SOCIAL SCIENCE 9-12	80.30	0.11%
VOCAL MUSIC K-12	75.82	0.11%
CHEMISTRY 9-12	74.20	0.10%
ENGLISH LANGUAGE LEARNERS K-12	66.97	0.09%
SPECIAL READING K-12	53.71	0.07%
SPANISH K-12	48.08	0.07%
HEALTH K-12	40.99	0.06%
GIFTED EDUCATION K-12	24.66	0.03%
SPEECH AND THEATRE 9-12	24.66	0.03%
BUSINESS EDUCATION 5-9	23.31	0.03%
TECHNOLOGY AND ENGINEERING 5-9	23.19	0.03%
AGRICULTURAL EDUCATION 9-12	18.28	0.03%
TECHNOLOGY AND ENGINEERING 9-12	17.55	0.03%
MARKETING 9-12	12.17	0.02%
SPEECH AND THEATRE 5-9	10.43	0.01%
AGRICULTURAL EDUCATION 5-9	8.00	0.01%
JOURNALISM 9-12	7.55	0.01%
Above content areas represent 4.94% of total FTE		